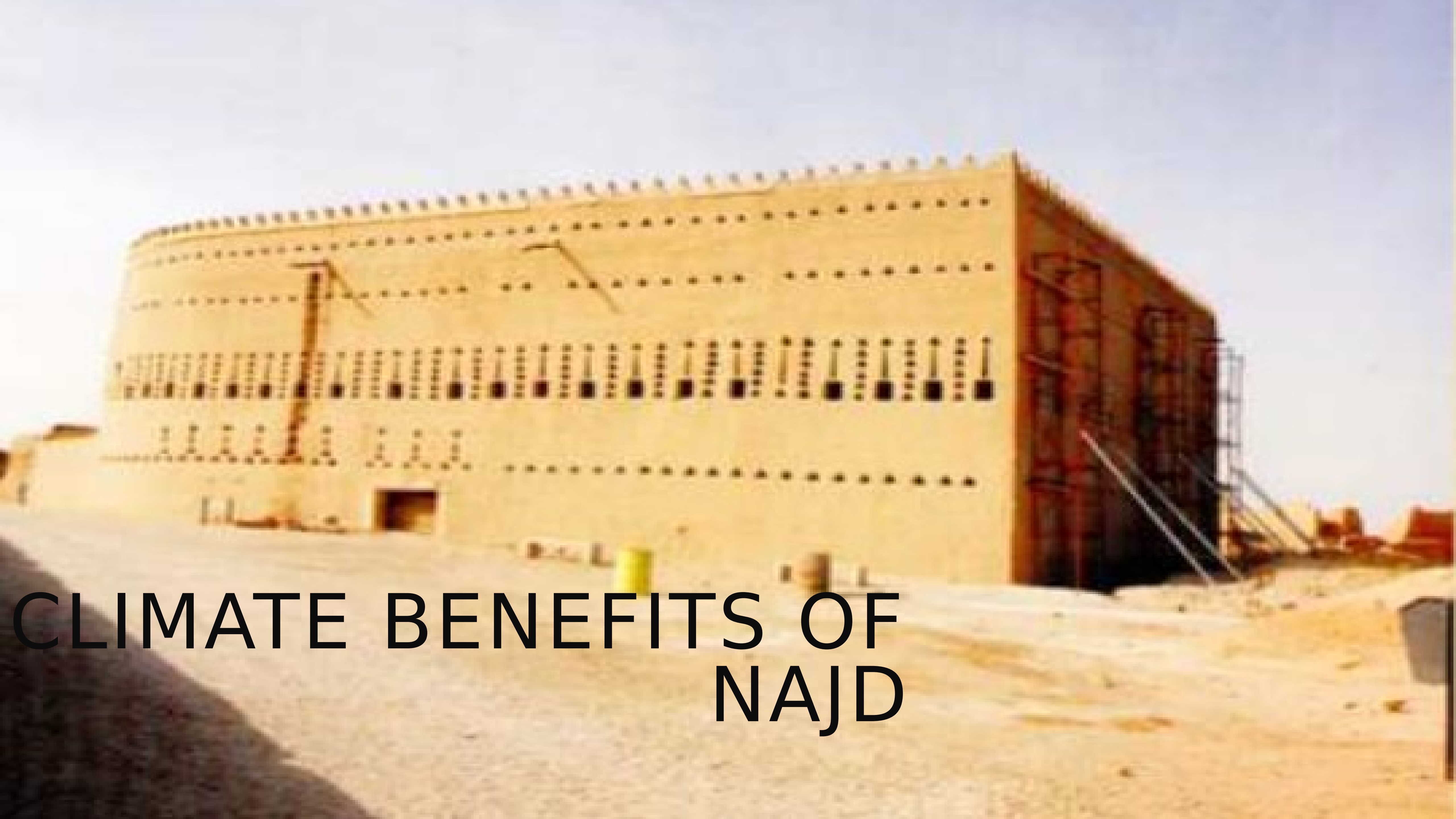
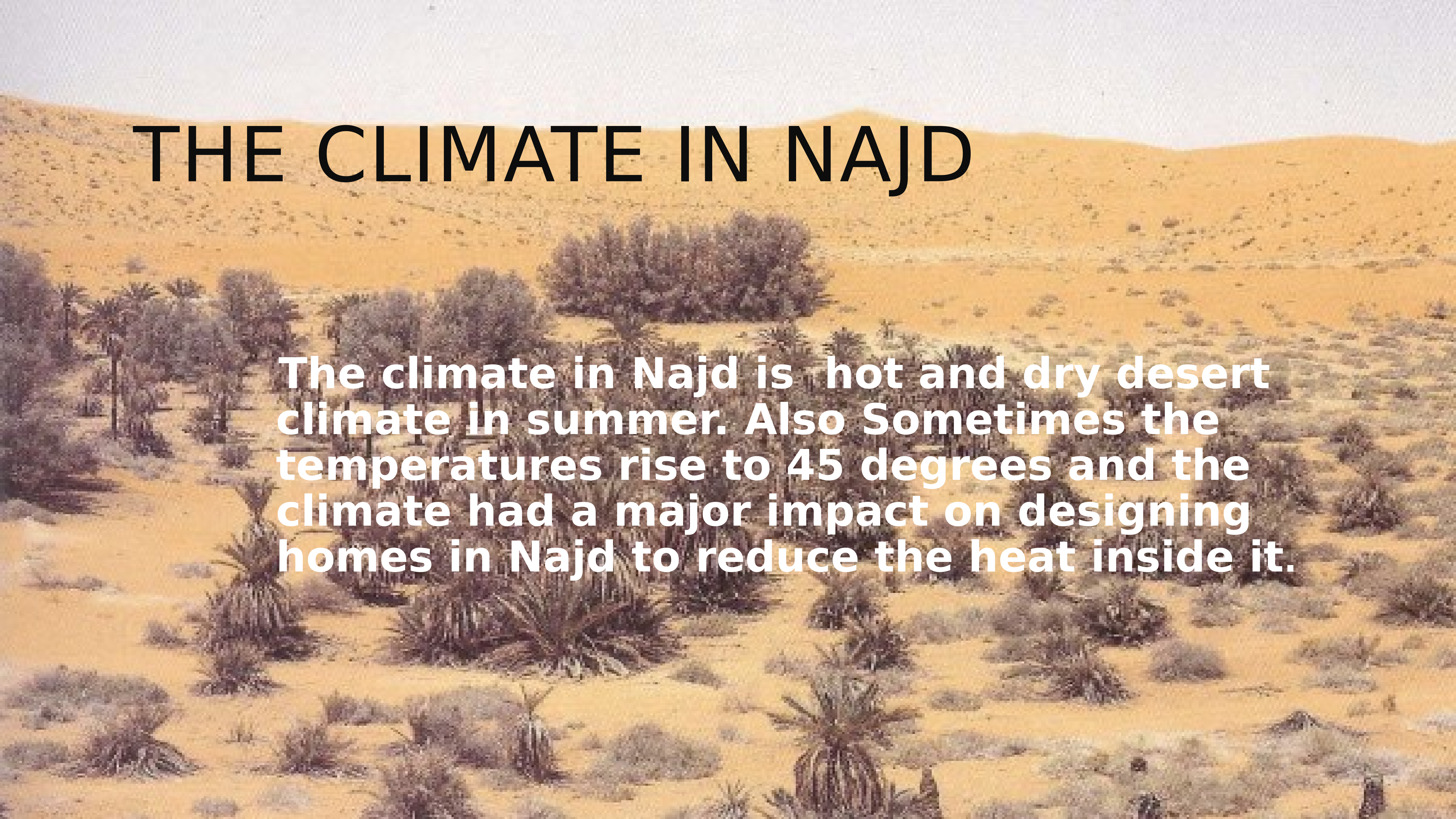


CLIMATE BENEFITS OF NAJD


THE CLIMATE IN NAJD
The climate in Najd is hot and dry desert climate in summer. Also Sometimes the temperatures rise to 45 degrees and the climate had a major impact on designing homes in Najd to reduce the heat inside it.

Houses converge in order to reduce surfaces exposed to weather factors such as

(the sun) and so that shade covers the largest possible area.





KING ABDULAZIZ AL-BADIA PALACE

IN THESE PHOTOS, HOT AIR COMES OUT FROM THE UPPER WINDOWS AND COLD AIR ENTERS THE LOWER WINDOWS. WINDOWS HELP AVOID DIRECT SUNLIGHT.



Skylights are opening in the ceiling, especially in guest rooms and kitchens, that open in summer to allow hot air to escape, and close in winter to keep warm.

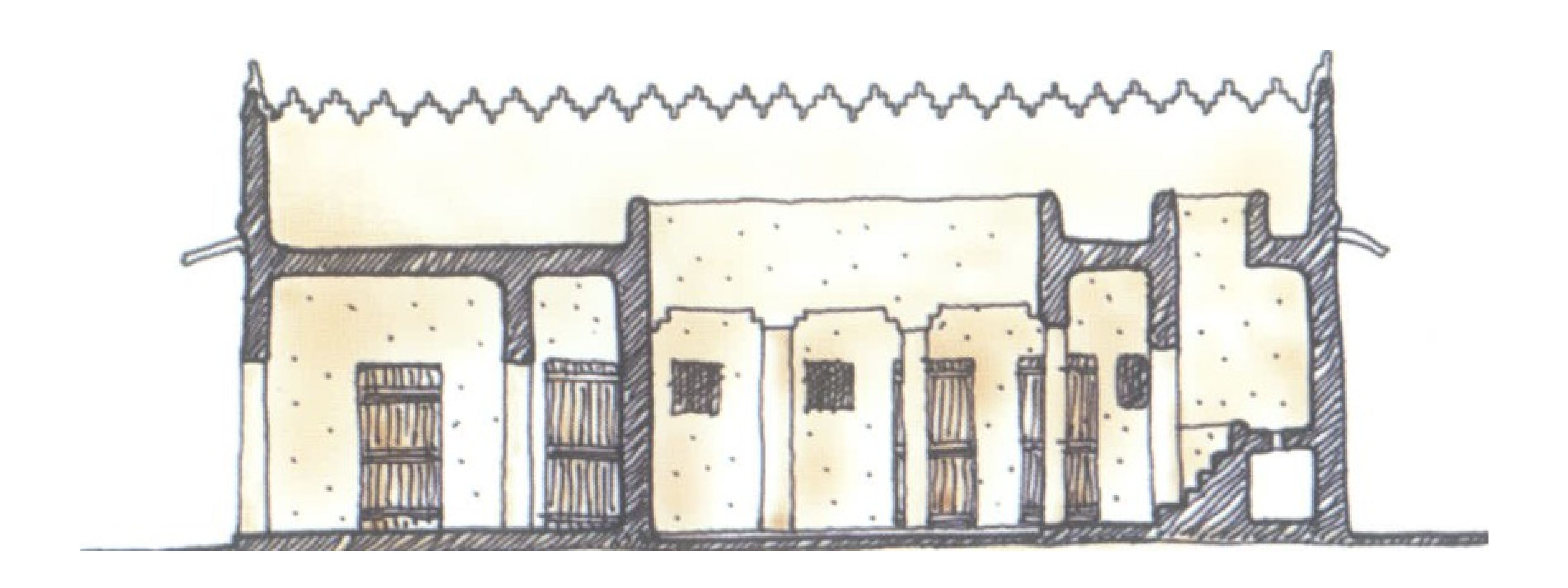


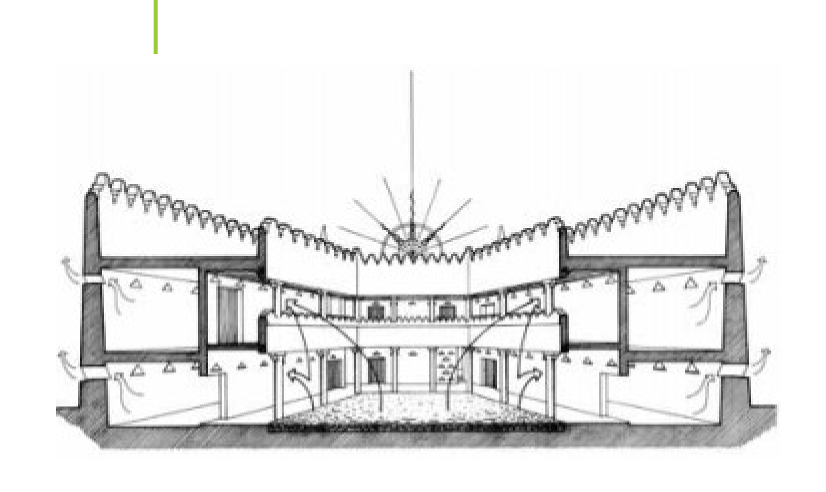
THE FACADES OF THE BUILDINGS ARE NOT STRAIGHT, BUT RATHER HAVE SLIGHT PROJECTIONS THAT REDUCE THE INFLUENCE OF THE WIND

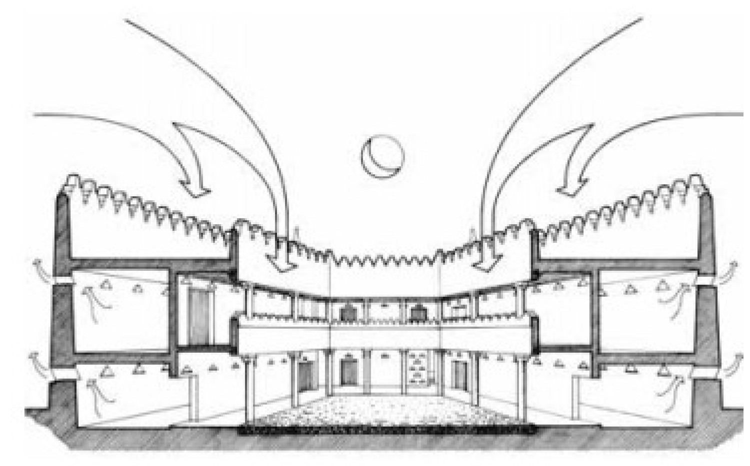


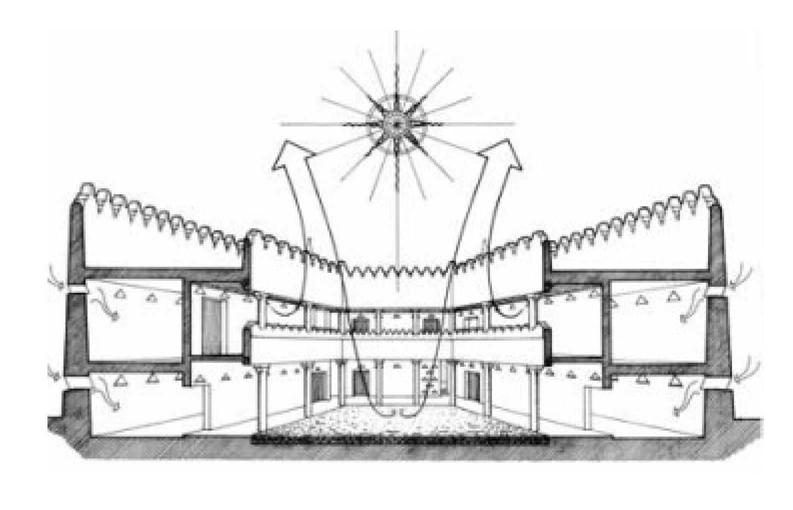


THE THICKNESS OF THE MUD WALLS HELPS TO ADAPT TO THE CLIMATIC FACTORS AND ITS ABILITY TO HEAT INSULATION









courtyard and building retain heat then give it off as night air cools.

courtyard and roof act as cool air sink.

SUN HEATS THE COURTYARD WARM AIR RISES CREATING CHIMNEY EFFECT AND PULLS BREEZE THROUGH ROOMS.



PALM ACTS AS A NATURAL FILTER THAT HELPS IN BREATHING FRESH AIR.



Presentation on the climate benefits of Nejd

The work of the student / Abdulaziz Al-Aklouk

2036348

Presented to:Prof. Hisham Murtada

OCTOBER 9